

308 Building/2A
April 9, 2002



Document Processing Desk - 6(a)(2)
Office of Pesticide Programs - 7504C
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: FIFRA § 6(a)(2) Report
Vikane* Gas Fumigant
EPA Registration Number: 62719-4
Active Ingredient: Sulfuryl Fluoride
CAS Registry Number: 002699-79-8
DERBI Number: 104741
State: FL
Severity Category: H-C

Dow AgroSciences submits the following information in response to its understanding of the U.S. Environmental Protection Agency's interpretation of FIFRA § 6(a)(2). However, Dow AgroSciences has not concluded that this information regards an "unreasonable adverse effect on the environment" or that it is reportable under FIFRA § 6(a)(2).

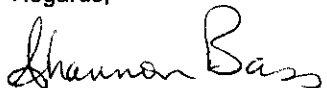
Dow AgroSciences received the enclosed information regarding alleged human exposure.

It is important to note that the Vikane Gas Fumigant label requires the introduction of chloropicrin to the structure prior to fumigation at a rate of one ounce per 10,000-15,000 feet (17-25 ppm) to serve as a warning agent. This warning agent causes smarting of eyes, tearing, throat and nose irritation, and a disagreeable pungent odor at very low concentrations (ca. 0.3 ppm).


The Vikane Gas Fumigant label states the following: "When fumigating, observe local, state and federal rules and regulations including such things as use of chloropicrin, clearing devices, positive-pressure self contained breathing apparatus, security requirements, and placement of warning signs:... Extremely Hazardous Liquid and Vapor Under Pressure, Inhalation of Vapors may be Fatal." Under the "Preparation for Fumigation" section of the label, the use directions for structural fumigation state "Remove from the structure to be fumigated all persons, domestic animals, pets - including fish and desirable growing plants." Also, under the Aeration and Reentry section of the label, use directions state "... treated area must be aerated until the level of sulfuryl fluoride is 5 ppm or less, as measured by a detection device with sufficient sensitivity such as an INTERSCAN or MIRAN gas analyzer." Within this section of the label it further states "Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, nor move vehicle until aeration is complete."

If you wish to discuss this matter further, please call us.

Regards,


Shannon Bass
EH&S Global Product Leader
(317) 337-4983

Prepared by:


Stacey Fruits
Product Stewardship Administrator
(317) 337-4577

*Trademark of Dow AgroSciences

Voluntary Industry Reporting Form for 6(a)(2) Adverse Effects Incident Information

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 1 of 3

Row 1	Reporter Name	Submission date.	Contact person (if different than reporter)	Internal ID 1-3414204
Administrative Data	Address Florida		Address	
	Phone #		Phone #	
	Incident Status: New	Location and date of incident Florida 3/25/02	Date registrant became aware of incident. 3/27/02	Was incident part of larger study? No
Row 2	EPA Registration # (Product 1) 62719-4	EPA Registration # (Product 2)	EPA Registration # (Product 3)	
Pesticide(s) Involved	A.I. (s) Sulfuryl Fluoride	A.I. (s)	A.I. (s)	
	Product 1 name Vikane	Product 2 Name	Product 3 Name	
	Exposed to concentrate prior to dilution? No	Exposed to concentrate prior to dilution?	Exposed to concentrate prior to dilution?	
	Formulation	Formulation	Formulation	
Row 3	Evidence label directions were not followed? No Intentional misuse? No	Incident site: (examples include home, yard, school, industrial, nursery/greenhouse, surface water, commercial turf, building/office, forest/ woods, agricultural (specify crop) right-of-way (rail, utility, highway)). Other Residence	Situation (act of using product): (examples include mixing/loading, reentry, application, transportation, repair/maintenance of application equipment, manufacturing/ formulating). Re-entry	
Incident Circumstances	Applicator certified PCO? Not applicable			
	How exposed: (examples include direct contact with treated surface, ingestion, spill, drift, runoff) See Incident Description			

DERBI: 104741
Report: Yes ☒ No ☐
If no, Why: **SC HC**
Date: **4/3/02**

Personal privacy

Brief description of incident circumstances.

3/27/02 11:40:37 AM epa reg #unknown
24 min call

HX: 2 days ago healthy adult f went into house that had been tented, entered 3 hrs after tent removed, a/c had been on. Asx during time except mouth felt funny. Did not touch anything but door handles. No eye watering, no odor noted, no resp sxs/nasal irritation, etc. That night at home became itchy all over body and rash on "covered" in rash, esp torso/face, voice became gravelly, throat sore, underside of eyelids sore and dry, mouth felt like it was burned by drinking a hot liquid, went to ER/ dx'd with hives/ allergic rxn to unknown thing. D/c'd to home, taking aveeno baths, methyprednisone po taper/ zyrtec 10 mg/ als had zantac in iv at hospital. Wants to know product info, when she can go back into house, other tx options. Caller had been in house before tenting and no sxs developed/ no other new exposures known, bug bites, etc.

A: Product not known to be harmful in situation described and no contact evident either with vikane or chloropicrin, explained house is tested before reentry allowed and vikane would not be in area, and though sometimes minute amt of chloropicrin still present, this is obvious because of sxs that occur in these cases ie tearing. Strongly rec consider other causes as well as individual allergy can occur anytime to anything, f/u with MD prn, tx done is based on sxs and appears correct/ may want to ask MD about atarax for itching prn, and epipen to carry. In case allergy is to something in house, rec do not re-enter house. Caller notes work is being done in house she needs to check on for her job, IPC repeated rec not to re-enter as precaution as sxs she has are severe and cause unknown. Cb/have MD cb prn anytime, gave case#, can fax MSDS prn, etc. Notified CL JG/DF of case.

3/27/02 4:56:52 PM Case reviewed.

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 3 of 3

Demographic information: Age: <i>Unknown Adult (18-64)</i> Sex: <i>Female</i> Occupation (if relevant)	Exposure route: <i>Inhalation</i>	Was adverse effect result of suicide/homicide or attempted suicide/homicide? <i>No</i>	Was protective clothing worn (specify)? <i>Not applicable</i>
If female, pregnant? <i>Did not query</i>	Was exposure occupational? <i>No</i> If yes, days lost due to illness:	Time between exposure and onset of symptoms: <i>See Symptoms</i>	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). <i>HCF</i>	List signs/symptoms/adverse effects <i>Pruritis - 12 hrs or less , Rash - 12 hrs or less , Oral Irritation - 12 hrs or less , Irritation/Pain - 12 hrs or less , Hives/Welts - 24 hrs or less , Throat Irritation - 12 hrs or less ,</i>		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: <i>HC</i>			

This box can be used to provide any explanatory or qualifying information surrounding the incident. (add additional pages if necessary)

The differential diagnosis for a dermatitis of this nature would include multiple potential etiologies. Sensitization or immune mediated reactions of this nature are not typically associated with re-entry into home fumigated with Vikane.

Internal ID #
1-3414264

308 Building/2A
April 9, 2002



Document Processing Desk - 6(a)(2)
Office of Pesticide Programs - 7504C
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: FIFRA § 6(a)(2) Report
Vikane* Gas Fumigant
EPA Registration Number: 62719-4
Active Ingredient: Sulfuryl Fluoride
CAS Registry Number: 002699-79-8
DERBI Number: 104722
State: Unknown
Severity Category: H-C

Dow AgroSciences submits the following information in response to its understanding of the U.S. Environmental Protection Agency's interpretation of FIFRA § 6(a)(2). However, Dow AgroSciences has not concluded that this information regards an "unreasonable adverse effect on the environment" or that it is reportable under FIFRA § 6(a)(2).

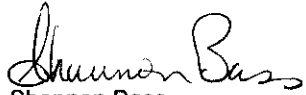
Dow AgroSciences received the enclosed information regarding alleged human exposure.

It is important to note that the Vikane Gas Fumigant label requires the introduction of chloropicrin to the structure prior to fumigation at a rate of one ounce per 10,000-15,000 feet (17-25 ppm) to serve as a warning agent. This warning agent causes smarting of eyes, tearing, throat and nose irritation, and a disagreeable pungent odor at very low concentrations (ca. 0.3 ppm).

The Vikane Gas Fumigant label states the following: "When fumigating, observe local, state and federal rules and regulations including such things as use of chloropicrin, clearing devices, positive-pressure self contained breathing apparatus, security requirements, and placement of warning signs:... Extremely Hazardous Liquid and Vapor Under Pressure, Inhalation of Vapors may be Fatal." Under the "Preparation for Fumigation" section of the label, the use directions for structural fumigation state "Remove from the structure to be fumigated all persons, domestic animals, pets - including fish and desirable growing plants." Also, under the Aeration and Reentry section of the label, use directions state "... treated area must be aerated until the level of sulfuryl fluoride is 5 ppm or less, as measured by a detection device with sufficient sensitivity such as an INTERSCAN or MIRAN gas analyzer." Within this section of the label it further states "Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, nor move vehicle until aeration is complete."

If you wish to discuss this matter further, please call us.

Regards,


Shannon Bass
EH&S Global Product Leader
(317) 337-4983

Prepared by:


Stacey Fruits
Product Stewardship Administrator
(317) 337-4577

*Trademark of Dow AgroSciences

PRODUCT(S) INVOLVED Vikane
 ACTIVE INGREDIENT Sulfuryl Fluoride
 REGISTRATION NUMBER 62719-004
 OTHER PRODUCTS None known

DILUTION/CONCENTRATE Unknown
 FORMULATION Unknown

DERBI NUMBER

NAME [REDACTED] Family (mother, father, [REDACTED])

COUNTY/CITY/STATE N/A

TELEPHONE NUMBER N/A

AGE [REDACTED] 6 yrs; Mother: 38 yrs

DATE OF INITIAL NOTIFICATION 1/30/2002 to employee

DATE OF APPLICATION 1994 and October 2, 1998

DATE OF INITIAL MEDICAL TREATMENT No medical records available at this time

OCCUPATIONAL INJURY No OCCUPATION N/A

HOME UNINHABITABLE No DISABLED No

DEATH No PREGNANT No

INCIDENT CIRCUMSTANCES

Reportedly, a residence was fumigated with Vikane by Orkin Pest Control in 1994 and again in 1998. Allegedly, the home was not cleared before the family reentered into the home. The family members now claim various symptoms.

TYPE OF APPLICATION Fumigation

AMOUNT OF PRODUCT APPLIED 19 lbs of Vikane

PERSONAL PROTECTIVE EQUIPMENT Unknown

LABEL DIRECTIONS FOLLOWED Unknown

CERTIFIED PCO/LCO Orkin Pest Control

LOCATION WHERE INCIDENT OCCURRED Residence

NUMBER OF PERSONS INVOLVED 3

ROUTE OF EXPOSURE Inhalation

DURATION OF EXPOSURE 24 hours

LENGTH OF TIME FROM EXPOSURE TO SYMPTOMS Within 8 hours

GENDER Female, Male

DERBI: 104722
 Report: Yes ☒ No ☐
 If no, Why:
 Date: 2/10/02

SYMPTOMS REPORTED

asthma, joint pains, white spots on nose, ADD-type symptoms

Mother: asthma, acne, joint pains, psychological distress

Father: asthma, acne, joint pains

Family: Burning eyes

RESULTING DIAGNOSIS

Mother: acute bronchitis, hyperactive airways

ADD type symptoms

TYPE OF MEDICAL CARE FACILITY

Hospital

ADDITIONAL INFORMATION

The home was tented and fumigated on 10/2/1998. Allegedly, the fumigator returned after the tent was removed to clear the home but the homeowner was not available. The homeowner entered the home anyway and remained in the house. The following Monday, the homeowner contacted the PCO and asked if they should be able to detect any odor or be having burning eyes. The PCO cleared the home on 10/6/1998.

was taken to ER on 10/5/1998 and the mother was taken on 10/6/1998.

41

None at this time.

None at this time.

[illegible]

308 Building/2A
April 9, 2002



Document Processing Desk - 6(a)(2)
Office of Pesticide Programs - 7504C
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: FIFRA § 6(a)(2) Report
Vikane* Gas Fumigant
EPA Registration Number: 62719-4
Active Ingredient: Sulfuryl Fluoride
CAS Registry Number: 002699-79-8
DERBI Number: 104728
State: CA
Severity Category: H-D, H-C

Dow AgroSciences submits the following information in response to its understanding of the U.S. Environmental Protection Agency's interpretation of FIFRA § 6(a)(2). However, Dow AgroSciences has not concluded that this information regards an "unreasonable adverse effect on the environment" or that it is reportable under FIFRA § 6(a)(2).

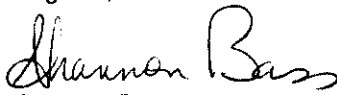
Dow AgroSciences received the enclosed information regarding alleged human exposure.

It is important to note that the Vikane Gas Fumigant label requires the introduction of chloropicrin to the structure prior to fumigation at a rate of one ounce per 10,000-15,000 feet (17-25 ppm) to serve as a warning agent. This warning agent causes smarting of eyes, tearing, throat and nose irritation, and a disagreeable pungent odor at very low concentrations (ca. 0.3 ppm).

The Vikane Gas Fumigant label states the following: "When fumigating, observe local, state and federal rules and regulations including such things as use of chloropicrin, clearing devices, positive-pressure self contained breathing apparatus, security requirements, and placement of warning signs:.... Extremely Hazardous Liquid and Vapor Under Pressure, Inhalation of Vapors may be Fatal." Under the "Preparation for Fumigation" section of the label, the use directions for structural fumigation state "Remove from the structure to be fumigated all persons, domestic animals, pets - including fish and desirable growing plants." Also, under the Aeration and Reentry section of the label, use directions state "... treated area must be aerated until the level of sulfuryl fluoride is 5 ppm or less, as measured by a detection device with sufficient sensitivity such as an INTERSCAN or MIRAN gas analyzer." Within this section of the label it further states "Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, nor move vehicle until aeration is complete."

If you wish to discuss this matter further, please call us.

Regards,


Shannon Bass
EH&S Global Product Leader
(317) 337-4983

Prepared by:


Stacey Fruits
Product Stewardship Administrator
(317) 337-4577

*Trademark of Dow AgroSciences

Voluntary Industry Reporting Form for 6(a)(2) Adverse Effects Incident Information

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 1 of 3

Row 1	Reporter Name	Submission date.	Contact person (if different than reporter)	Internal ID
Administrative Data	<i>Natalie of AA Same Day Exterminators</i>			<i>1-3274760</i>
	Address		Address	
	<i>AA Same Day Exterminators Vista/ San Diego County California 92084</i>			
	Phone # <i>(760) 941-9880</i>		Phone #	
	Incident Status:	Location and date of incident	Date registrant became aware of incident.	Was incident part of larger study? <i>No</i>
	<i>New</i>	<i>Vista/ San Diego County California 3/11/02</i>	<i>3/15/02</i>	
Row 2	EPA Registration # (Product 1)	EPA Registration # (Product 2)	EPA Registration # (Product 3)	
Pesticide(s) Involved	<i>62719-4</i>			
	A.I. (s)	A.I. (s)	A.I. (s)	
	<i>Sulfuryl Fluoride</i>			
	Product 1 name	Product 2 Name	Product 3 Name	
	<i>Vikane</i>			
	Exposed to concentrate prior to dilution? <i>No</i>	Exposed to concentrate prior to dilution?	Exposed to concentrate prior to dilution?	
	Formulation	Formulation	Formulation	
Row 3	Evidence label directions were not followed? <i>No</i>	Incident site: (examples include home, yard, school, industrial, nursery/greenhouse, surface water, commercial turf, building/office, forest/ woods, agricultural (specify crop) right-of-way (rail, utility, highway)).	Situation (act of using product): (examples include mixing/loading, reentry, application, transportation, repair/ maintenance of application equipment, manufacturing/ formulating).	
Incident Circumstances	Intentional misuse? <i>No</i>	<i>Own Residence</i>	<i>Re-entry</i>	
	Applicator certified PCO? <i>Not applicable</i>			
	How exposed: (examples include direct contact with treated surface, ingestion, spill, drift, runoff)			
	<i>See Incident Description</i>			

DERBI: 104728
Report: Yes ☒ No ☐
If no, Why?
Date: *3/20/02*

SC HD, HC
44

Personal privacy

Brief description of incident circumstances.

3/15/02 1:17:49 PM epa reg 62719-4

HX: PCO calling, states adult female whose home was tx'd with product 3/11 as directed, now called to say she was dx'd with pneumonia. Tx was same day as re-entry/ about 6 hrs after application, tested fine. W

Woman did not cb to c/o odor, call PCO after reentry till today, did not mention any odor now. Just had +CXR yesterday. Just told PCO she had HA, nausea, breathing problems, watery eyes/nose upon reentry. Unknown if any sxs before, no PMH known, tx, etc. Customer was given info on product/ chloropicrin which apparently according to caller does mention pneumonia. Customer of PCO is [REDACTED]

A: Product safe when used as directed but if caller did not read info sheet stating if sxs occur after fumigation that she should leave home immediately and contact PCO, and esp if woman had previous resp hx ie asthma, smoking, allergies, etc, and odor noted, any odor can generate increased mucous production in resp tract and put person at higher risk for picking up an infectious illness, but product not expected to directly cause viral or bacterial infection ie pneumonia. Initial eye sxs or a cough is consistent with minute amts of chloropicrin possibly left in home, would not expect vikane to still have been present after testing. Any initial reentry sxs typically resolve shortly with fresh air. Rec offer IPC phone/case# to woman/ her MD for any further concerns/?s/ MSDS, etc.

PT knows no further info, no cb set/ PLEASE set cb if pt calls IPC.

Notified CL JG, clin tox DF.

3/16/02 2:33:29 PM [REDACTED] calling in. Home # as noted.

Home was treated x 2-last time was on Monday.

Went into house on Tues. Did not smell odor. Walked into back of house and immed had burning of nose and eyes, nausea. Stayed in house about 1 hour. Husband also had burning and tearing of eyes. He had no other sx. Her resp sx continued to worsen. Seen in ED. X-ray positive for pneumonia.

Zithromax given. No sputum culture taken. No blood tests.

Today states fever and headache are gone. Continues to have resp sx, incl coughing up blood. REsp sx have not gotten better. Has MD f/u on Monday. Gave MD our case #. Wanted to know if MD had called.

A: Disc: Vikane and Chloropicrin exposure sx. Chloropicrin would not cause pneumonia.

Consulted with DF.

Pneumonia not caused from chloropicrin. Fever would not be either. LFTs and RFTs recd. Vikane exposure is unlikely - PCO tested house before re-entry.

CB to [REDACTED] with above information.

REcd: Call PMD now because she hadn't told MD about coughing blood and resp sx have not gotten better. Have MD cb prn. CB prn.

3/16/02 6:23:57 PM Case reviewed.

3/18/02 2:10:29 PM NP calling, Shelly Hammer

Md is Timothy Lindmood 760.806.5520

HX: [REDACTED] has RML pneumonia/ zithromax, sxs worse though RML clearing, now more of a RAD problems, starting pred burst now. About to examine husband [REDACTED] for cough that may have started around time of product application. Did cholinesterase/ liver/kidney panel, not sure why. Told to call IPC.

A: Offered to fax info prn. Would not expect product to cause pneumonia/ reviewed gen info on vikane and chloropicrin, would not expect either to be present at this point/ causing sxs. Bronchospasm can be triggered by pneumonia, etc. Tx is based on sxs, product is not an OP or cholinesterase inhibitor and sxs not consistent with OP exposure, no systemic tox effecting kidney/liver expected. Cb/have MD cb prn.

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 3 of 3

Demographic information: Age: <i>Unknown Adult (18-64)</i> Sex: <i>Male</i> Occupation (if relevant)	Exposure route: <i>Ocular</i>	Was adverse effect result of suicide/homicide or attempted suicide/homicide? <i>No</i>	Was protective clothing worn (specify)? <i>Not applicable</i>
If female, pregnant? <i>Did not query</i>	Was exposure occupational? <i>No</i> If yes, days lost due to illness:	Time between exposure and onset of symptoms: <i>See Symptoms</i>	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). <i>HCF</i>	List signs/symptoms/adverse effects <i>Irritation/pain - 15 min or less , Lacrimation - 15 min or less , Cough/choke - Unable to determine ,</i>		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: <i>HD</i>			

This box can be used to provide any explanatory or qualifying information surrounding the incident. (add additional pages if necessary)

Re-entry into a treated dwelling is not permitted until Vikane levels drop below 5 ppm, a level known to be well below the threshold for potential toxicity. Chloropicrin, a lacrimating warning agent, is also used with Vikane and may produce eye irritation and upper respiratory irritation. Chloropicrin would typically have dissipated by the time the tenants returned to the residence. The pneumonia as reported in this case is most likely caused by an infectious etiology and is being treated as such.

Internal ID #
1-3274763

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 3 of 3

Demographic information: Age: 58 Years Sex: Female Occupation (if relevant)	Exposure route: Inhalation Ocular	Was adverse effect result of suicide/homicide or attempted suicide/homicide? No	Was protective clothing worn (specify)? Not applicable
If female, pregnant? Did not query	Was exposure occupational? No If yes, days lost due to illness:	Time between exposure and onset of symptoms: See Symptoms	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). HCF	List signs/symptoms/adverse effects Pneumonia - 1 week or less , Headache - 30 min or less , Respiratory irritation - 30 min or less , Lacrimation - 30 min or less , Nasal discharge - 30 min or less ,		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: HC			

This box can be used to provide any explanatory or qualifying information surrounding the incident. (add additional pages if necessary)

Re-entry into a treated dwelling is not permitted until Vikane levels drop below 5 ppm, a level known to be well below the threshold for potential toxicity. Chloropicrin, a lacrimating warning agent, is also used with Vikane and may produce eye irritation and upper respiratory irritation. Chloropicrin would typically have dissipated by the time the tenants returned to the residence. The pneumonia as reported in this case is most likely caused by an infectious etiology and is being treated as such.

Internal ID #
1-3274760

308 Building/2A
April 9, 2002



Document Processing Desk - 6(a)(2)
Office of Pesticide Programs - 7504C
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

RE: FIFRA § 6(a)(2) Report
Vikane* Gas Fumigant
EPA Registration Number: 62719-4
Active Ingredient: Sulfuryl Fluoride
CAS Registry Number: 002699-79-8
DERBI Number: 104437
State: CA
Severity Category: H-C

Dow AgroSciences submits the following information in response to its understanding of the U.S. Environmental Protection Agency's interpretation of FIFRA § 6(a)(2). However, Dow AgroSciences has not concluded that this information regards an "unreasonable adverse effect on the environment" or that it is reportable under FIFRA § 6(a)(2).

Dow AgroSciences received the enclosed information regarding alleged human exposure.

It is important to note that the Vikane Gas Fumigant label requires the introduction of chloropicrin to the structure prior to fumigation at a rate of one ounce per 10,000-15,000 feet (17-25 ppm) to serve as a warning agent. This warning agent causes smarting of eyes, tearing, throat and nose irritation, and a disagreeable pungent odor at very low concentrations (ca. 0.3 ppm).

The Vikane Gas Fumigant label states the following: "When fumigating, observe local, state and federal rules and regulations including such things as use of chloropicrin, clearing devices, positive-pressure self contained breathing apparatus, security requirements, and placement of warning signs:... Extremely Hazardous Liquid and Vapor Under Pressure, Inhalation of Vapors may be Fatal." Under the "Preparation for Fumigation" section of the label, the use directions for structural fumigation state "Remove from the structure to be fumigated all persons, domestic animals, pets - including fish and desirable growing plants." Also, under the Aeration and Reentry section of the label, use directions state "... treated area must be aerated until the level of sulfuryl fluoride is 5 ppm or less, as measured by a detection device with sufficient sensitivity such as an INTERSCAN or MIRAN gas analyzer." Within this section of the label it further states "Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, nor move vehicle until aeration is complete."

If you wish to discuss this matter further, please call us.

Regards,

A handwritten signature in cursive script, appearing to read "Shannon Bass".

Shannon Bass
EH&S Global Product Leader
(317) 337-4983

Prepared by:

A handwritten signature in cursive script, appearing to read "Stacey Fruits".

Stacey Fruits
Product Stewardship Administrator
(317) 337-4577

*Trademark of Dow AgroSciences

Voluntary Industry Reporting Form for 6(a)(2) Adverse Effects Incident Information

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 1 of 3

Row 1	Reporter Name	Submission date.	Contact person (if different than reporter)	Internal ID 1-1903913	
Administrative Data	Address		Address		
	Phone #		Phone #		
	Incident Status: New	Location and date of incident San Diego California 10/23/01	Date registrant became aware of incident. 10/27/01	Was incident part of larger study? No	
Row 2	EPA Registration # (Product 1)	EPA Registration # (Product 2)	EPA Registration # (Product 3)		
	62719-4				
	A.I. (s)	A.I. (s)	A.I. (s)		
	Sulfuryl Fluoride				
	Product 1 name	Product 2 Name	Product 3 Name		
	Vikane				
	Exposed to concentrate prior to dilution? No	Exposed to concentrate prior to dilution?	Exposed to concentrate prior to dilution?		
	Formulation	Formulation	Formulation		
Row 3	Evidence label directions were not followed? No	Incident site: (examples include home, yard, school, industrial, nursery/greenhouse, surface water, commercial turf, building/office, forest/ woods, agricultural (specify crop) right-of-way (rail, utility, highway)). Own Residence	Situation (act of using product): (examples include mixing/loading, reentry, application, transportation, repair/maintenance of application equipment, manufacturing/ formulating). Re-entry		
	Intentional misuse? No				
	Applicator certified PCO? Not applicable				
Incident Circumstances	How exposed: (examples include direct contact with treated surface, ingestion, spill, drift, runoff) See Incident Description				

DERBI: 104437
Report: Yes ☒ No ☐
If no, why: _____
Date: **11-1-01**

Handwritten signatures and initials

Voluntary Industry Reporting Form for 6(a)(2) Adverse Effects Incident Information

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 1 of 3

Row 1	Reporter Name	Submission date.	Contact person (if different than reporter)	Internal ID 1-3192959
Administrative Data	Address		Address	
	Phone #		Phone #	
	Incident Status: New	Location and date of incident San Diego California 10/5/01	Date registrant became aware of incident. 3/7/02	Was incident part of larger study? No
Row 2	EPA Registration # (Product 1) 62719-4	EPA Registration # (Product 2)	EPA Registration # (Product 3)	
Pesticide(s) Involved	A.I. (s) Sulfuryl Fluoride	A.I. (s)	A.I. (s)	
	Product 1 name Vikane	Product 2 Name	Product 3 Name	
	Exposed to concentrate prior to dilution? NA	Exposed to concentrate prior to dilution?	Exposed to concentrate prior to dilution?	
	Formulation	Formulation	Formulation	
Row 3	Evidence label directions were not followed? No Intentional misuse? No	Incident site: (examples include home, yard, school, industrial, nursery/greenhouse, surface water, commercial turf, building/office, forest/ woods, agricultural (specify crop) right-of-way (rail, utility, highway)). Own Residence	Situation (act of using product): (examples include mixing/loading, reentry, application, transportation, repair/ maintenance of application equipment, manufacturing/ formulating). Application	
Applicator certified PCO? Not applicable				
How exposed: (examples include direct contact with treated surface, ingestion, spill, drift, runoff) See Incident Description				

104437

Brief description of incident circumstances.

10/27/01 5:01:35 PM Oct 23, 2001 next door neighbor had house treated with Vikane. Caller states tent was removed 18 hours later. She could smell the chem. Then had sudden onset of sore throat, swelling in throat and ear canals. Now has fatigue and speech is affected. She called 911 and "they didn't do anything". She called her PMD who said he couldn't do anything about it. Has not seen MD for sx.

She is a news writer and is in charge of the Environmental Health Coalition in San Diego.

Has long history of chem. sensitivities. Had past exposures to malathion and dursban. Has been seen by "researchers". Was declared by the State of CA as having "severe disability due to asthma and resp sx". Cannot take medicines, so is using herbs.

Requesting written information of this call. Wants client to know she has had this reaction to chem from neighbor's treated house. House was treated by Terminex. They are denying any wrongdoing. She was told odor could have been from new tarps.

A: told her I am unable to provide her with written information of this call. Case # given. I tried to give information about vikane and she kept interrupting me.

REcd: Eval by MD. States she is not going to do this. She states she wants to talk to the company about their prod. Gave CS # for Monday.

JG notified via email.

3/18/02 1:41:19 PM [REDACTED] called again on 3/7/02 to report the following.

Adjacent unattached home fumigated on 10/23/01. No physical connection between home. She could smell strong odor in her closed up house, no windows were open until some time after tent removed. Initial sxs throat on fire, top of head felt strange, time slowed down, slowed speech, did not leave house called 911 3hrs later. Now curling gone 1 week ago, speech is better, memory bad, hearing loss until early Dec200. Hand, fingers curled up and stayed that way until week ago. Now skin broke on 1 finger and slight bleeding. Thinking is still slow. Has seen multiple MD's 2 have told they can't see her anymore, that they can't help?. Going to neurologist next week. She said California epa dept gave her our phone# and told her to report all info to us.

As: Typically the house inside the tent is only place gas can be smelled. Doesn't typically travel to house near by.

Rec: Follow up with your MD's. gave case# cb prn

4/2/02 10:48:03 PM

[REDACTED] is called again on 3/13 wanting to know why her finger bled. She spoke to John Shevlin.

RESPONSE: I have no explanation. You may have your MD reference this case if he/she has any questions.

Personal privacy

Brief description of incident circumstances.

3/7/02 1:34:26 PM Oct 23,24 2001 plus 10 days after tent was removed from next store home several yards away. No physical connection between home. She could smell strong odor in her closed up house, no windows were open until some time after tent removed.

Initial sxs throat on fire, top of head felt strange, time slowed down, slowed speech, did not leave house called 911 3hrs later. Now curling gone 1 week ago, speech is better, memory bad, hearing loss until early Dec200. Hand, fingers curled up and stayed that way until week ago. Now skin broke on 1 finger and slight bleeding. Thinking is still slow. Has seen multiple MD's 2 have told they can't see her anymore, that they can't help?. Going to neurologist next week. She said California epa dept gave her our phone# and told her to report all info to us.

As: Typically the house inside the tent is only place gas can be smelled. Doesn't typically travel to house near by.

Rec: Follow up with your MD's. gave case# cb prn

3/13/02 11:02:33 AM [REDACTED] is calling to know why her finger bled.

RESPONSE: I have no explanation. You may have your MD reference this case if he/she has any questions.

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 3 of 3

Demographic information: Age: <i>57 Years</i> Sex: <i>Female</i> Occupation (if relevant)	Exposure route: <i>Unknown</i>	Was adverse effect result of suicide/homicide or attempted suicide/homicide? <i>No</i>	Was protective clothing worn (specify)? <i>Not applicable</i>
If female, pregnant? <i>Did not query</i>	Was exposure occupational? <i>No</i> If yes, days lost due to illness:	Time between exposure and onset of symptoms: <i>See Symptoms</i>	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). <i>HCF</i>	List signs/symptoms/adverse effects <i>Throat Irritation - 30 min or less , slurred speech, memory bad 3 days or less hearing loss, curled up finger 1 week or less bleeding of one finger More than 2 weeks</i>		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: <i>HC</i>			

This box can be used to provide any explanatory or qualifying information surrounding the incident. (add additional pages if necessary)

Since the caller's residence was several yards from the unattached fumigated home, there would be no physical means by which the caller could have been exposed to appreciable amounts of either Vikane or chloropicrin. Also, the reported symptoms are not consistent with the known toxicity profile of either agent.

Internal ID #
1-3192959

Voluntary Industry Reporting Form for 6(a)(2) Incident Information Involving Humans

Provide all known, required information. If required data field information is unknown, designate as such in appropriate area. Page# 3 of 3

Demographic information: Age: 57 Sex: Female Occupation (if relevant)	Exposure route: Inhalation	Was adverse effect result of suicide/homicide or attempted suicide/homicide? No	Was protective clothing worn (specify)? Not applicable
If female, pregnant? Did not query	Was exposure occupational? No If yes, days lost due to illness:	Time between exposure and onset of symptoms: See Symptoms	
Type of medical care sought: (examples include none, clinic, hospital emergency department, private physician, PCC, hospital inpatient). On-site	List signs/symptoms/adverse effects fatigue, speech problems 6 hrs or less Throat Irritation - 6 hrs or less , Multiple chem sensitivity - Unable to determine ,		If lab tests were performed, list test names and results (If available, submit reports)
Exposure data: Amount of pesticide: Exposure duration: Weight:			
Human severity category: HC			

This box can be used to provide any explanatory or qualifying information surrounding the incident. (add additional pages if necessary)

There is no physical means by which the Vikane or chloropicrin could traverse the air space between the unattached buildings to a degree great enough to cause the accumulation of Vikane or chloropicrin in the secondary dwelling, especially given that the original dwelling was sealed and tented. Also, the symptoms reported by the patient are not consistent with the tox profile of vikane.

Internal ID #
1-1903913